### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-015289 Address: 333 Burma Road **Date Inspected:** 04-Jul-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Wu Zhi Zhang No Yes **Inspected CWI report:** N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** OBG

## **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

TRIAL ASSEMBLY YARD

ULTRASONIC INSPECTION

**OBG SEGMENT 11CE** 

ABF Request No: 07032010-1

This QA Inspector performed verification Ultrasonic Testing (UT) in accordance with ABF/CT Pattern "D" UT Procedure 001 Revision 1. All recordable Indications if found were recorded on a data sheet that Caltrans QA generates after performing a joint inspection. The members are identified as the weld between edge panel and deck panel (Cross beam side) of OBG segment 11CE. Inspection was carried out on repair areas. The weld designations are as follows.

CA087-004 (OBG 11CE, E.P to D.P – Cross beam side)

TRIAL ASSEMBLY YARD

# WELDING INSPECTION REPORT

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This QA Inspector randomly observed the following work in progress.

#### **OBG SEGMENT 9AW-9BW**

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 045246 performing Shielded Metal Arc Welding process for weld 002 located on PCMK CA059. ZPMC QC Mr. Zhu Zhong Hai monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-Tc-u4b-fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 045196 performing Shielded Metal Arc Welding process for weld 004 located on PCMK OBW9. ZPMC QC Mr. Zhang Hai Tao monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-4G (4F)-Fcm-Repair-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 037723 performing Shielded Metal Arc Welding process for weld 003 located on PCMK OBW9. ZPMC QC Mr. Zhang Hai Tao monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-4G (4F)-Fcm-Repair-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 068097 performing Shielded Metal Arc Welding process for weld 005 located on PCMK OBW9. ZPMC QC Mr. Zhang Hai Tao monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-4G (4F)-Fcm-Repair-1.

This Quality Assurance (QA) Inspector observed ZPMC QA Inspector performing Ultrasonic Inspection for the weld between longitudinal diaphragm web to floor beam at PP73 cross beam side in OBG segment 9AW.

This Quality Assurance (QA) Inspector observed ZPMC QA Inspector performing Magnetic particle Inspection for the hold back weld between "T" stiffener and side panel in OBG segment 9AW at 8CW (Cross beam side).

Unless otherwise noted, all work observed on this dated appeared to generally comply with applicable contract documents.





#### **Summary of Conversations:**

Only general conversation was held between QA and QC **Comments** 

# WELDING INSPECTION REPORT

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This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

Inspected By:	Utekar,Shrikant	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer